Housatonic Environmental Action League, Inc.

Post Office Box 21, Cornwall Bridge, CT 06754-0021

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September 30, 2003

Alison Wolfe MNG Center at SRA 2801 Clarendon Blvd., Suite 100 Arlington, VA 22201

RE: Comments on the Ecological Risk Assessment for General Electric (GE)/Housatonic River Site Rest of River, volumes I-II, DCN:GE-070703-ABRC, July 2003, Environmental Remediation Contract, US Environmental Protection Agency, US Army Corps of Engineers, Weston Solutions

Sent via email: GEPittsfield@sra.com

Dear Ms. Wolfe,

The Housatonic Environmental Action League, Inc. (HEAL) is a 501(c)(3) non-profit, non-partisan, broad-based, grassroots environmental advocacy coalition that includes individuals and organizations from the tri-state area (CT, MA, NY) who are dedicated to the protection of the Housatonic River and its watershed. Our organization has been actively involved with the Environmental Protection Agency's (EPA) Housatonic River Project particularly as it relates to General Electric's (GE) polychlorinated biphenyl (PCB) contamination of the river.

Please enter HEAL's comments into consideration by the Ecological Risk Assessment (EcoRA) Peer Review panel.

- HEAL fully supports and endorses the comments submitted by Dr. Peter L. deFur and his associates at Environmental Stewardship Concepts. Dr. deFur was contracted by the Housatonic River Initiative (HRI) who is the single recipient of the EPA's Technical Assistance Grant (TAG). HEAL appreciates the opportunity afforded our organization to provide input to Dr. deFur during his expert review of the EcoRA.
- We would like to reinforce our concerns regarding the data that indicates apparent reproducing populations of certain species in the riverine system. The current EPA risk assessment protocol that relies solely on evidence of reproducing populations as

an indicator of the "health" of a species is inadequate and, we believe, incorrect in the presence of polychlorinated biphenyls (PCBs) and other toxins introduced/dumped into the Housatonic River watershed by General Electric. We have found this to be most dramatically demonstrated in the fish population in the Connecticut (CT) section of the river. Multiple HEAL members and other stakeholders continue to observe fish with gross external abnormalities in various species (e.g. various body lesions, sores and anatomical anomalies). Toxins that do not overtly lead to the immediate demise of a contaminated organism and allows continued, yet impaired, reproduction, do not fit within the EPA's ecological risk assessment framework. Additional attention in the data to individuals within a population is indicated.

- HEAL strongly requests that a cultural and archeological resources assessment be completed. As an example, we could find no reference in the EcoRA or HHRA pertaining to those who are no longer being able to practice their traditional food practices and not able to fully practice their religion that traditionally includes wildlife.
- This study and the Human Health Risk Assessment (HHRA) study took researchers/scientists over five years to complete. It is unreasonable to expect that non-expert stakeholders can read and comment on these documents in only a few weeks' window.
- Any presentation looses its audience after a 90 minute time period. The HHRA and EcoRA public presentations were many hours long and were well beyond the scope of the general lay public. We appreciate that the body of risk assessment is a difficult science. Despite that, stakeholders should not be required to possess advanced college degrees in order to understand the basic concepts and data in order to provide the framework for questions and comments. Public participation plans are ineffective if they remain in their written form and are not implemented in a fashion that embraces and reaches all interested stakeholders.
- Members of the Schaghticoke Indian Tribe have shared with HEAL their traditional consumption practices dating back 40-50 years for the representatives we interviewed. One of their favorite and most frequent meal consisted of bottom feeding fish (catfish, bullhead, carp) being encased in a thick covering of river bottom mud, and being placed (ungutted) in an open fire to cook. This particular meal was consumed about 3-4 times each week. Additionally, they were subsistence consumers from the entire river system that included, among other things, eel (no longer found in the river), all fish, frog, turtle, squirrel, rabbit, raccoon, turkey, deer, goose, duck, snake, mushrooms, greenery and multiple types of tree barks. They shared that all parts of the animals were consumed including organs (e.g. liver) and fats. Of course these consumption practices included children, pregnant women, breastfeeding women and women of childbearing age. These practices have been recently curtailed (? 4-5 years ago), with enhanced reduction of certain species since HEAL contacted them in 1999. We could find no reference(s) in the EcoRA to

- species that are no longer found within the river system and no reference or data to other currently potentially (and probably) contaminated species still consumed.
- There have been no duck sampling in CT despite the duck tissue in MA found to have the highest levels of PCBs ever found in living tissue. HEAL has been told repeatedly that the contaminated duck are "Massachusetts ducks", and that the CT Department of Environmental Protection (DEP) and CT Department of Public Health (DPH) have no plans to add waterfowl to consumption advisories. HEAL requests additional waterfowl sampling in CT to determine risk and potentially adding species to advisories.
- Frog and turtle are not included in the CT consumption advisories. Representatives of DEP have repeatedly stated at meetings that their field surveys show no one eats frog or turtle in the CT section of the river. HEAL requests further sampling of frog and turtle in CT to determine risk and potentially adding species to advisories.
- Dr. Deborah Rice and Dr. Susan Schantz (among others) have clearly demonstrated reproducible adverse effects to living tissue when exposed to PCBs in levels as low as parts per trillion. We believe it is past due that the reduction of acceptable threshold/response levels be instituted.
- Inadequate attention to the volatilization of PCBs throughout the river system in light of compelling research that indicates this as a definite pathway of exposure.
- Tree bark uptake of PCBs research has not been considered (Dr. David Carpenter, et al.). Consideration needs to be addressed for those that harvest tree bark for human consumption and to the animals that include tree bark in their diets.
- Most data for the CT section of Rest of River reaches is historic and generated by GE. We do not trust GE's data and do not believe the RP's data should be allowed in the absence of parallel sampling by EPA. (A glaring example of GE's data is found in the Stewart Report that states PCB levels in sediments ranged from less than 1 to 210 ppm (dry weight) and appeared to be confined to the upper 12 inches of the sediment. It went on to estimate that a total of 39,000 pounds of PCBs remained in the river system.)
- For years HEAL has called for additional baseline testing of the floodplain in CT and additional deep core sampling behind the CT dams to determine the full extent of PCB contamination and to clearly define any hot spots in the system.
- No human, agricultural or wildlife adipose samples, thyroid function studies, other endocrine sampling or breast milk analysis were completed in this system that is heavily contaminated with PCBs, a known endocrine disruptor. Please consider recommending further testing.

- "When an activity raises threats of harm to the environment or human health, precautionary measures should be taken even if some cause and effect relationships are not fully established scientifically. In this context the proponent of an activity, rather than the public, should bear the burden of proof. The process of applying the Precautionary Principle must be open, informed and democratic and must include potentially affected parties." (Taken from the Wingspread Consensus Statement on the Precautionary Principle, 1998.
 - HEAL fully supports and endorses the Precautionary Principle and urges the PR panel to incorporate it into their discussions and findings.
- The fiction continues that areas left untouched will improve naturally. PCBs do not degrade naturally and will persist for centuries. Dispersal by air will harm people in northern latitudes (Alaska, northern Canada, Scandinavia, etc.) where PCBs hit the cold air, settle out and concentrate in local fish and meat. This is not "recovery" but merely a shifting of health risks to people in other regions.
- HEAL along with the Housatonic River Initiative, Inc. organized the first PCB Congress that took place in March, 2003. The Declaration of Independence from PCBs was written, ratified and signed by numerous individuals and organizations dealing with PCB-contaminated sites. We encourage the PR panel and EPA to read and incorporated the Declaration into their recommendations and considerations.
- A recent newspaper article indicates that an environmental laboratory at the University of Connecticut is under investigation by the CT Attorney General's office related to fraudulent research and data. The CT Department of Environmental Protection has historically used this lab. HEAL was not able to ascertain whether Housatonic River samples were processed in this lab. Until such time as it can be determined that no Housatonic River specimens were processed in this lab, all CT DEP data should not be considered viable (see attachment).

Leaving the PCB-contaminated material in and around the river will not adequately reduce the risk to human health or the environment. Preventing further contamination is not enough. The wildlife, the river, and the people of the Housatonic River watershed deserve and demand better - we want the Housatonic River returned to its pre-General Electric state. Until the PCBs are removed and destroyed, this site can only be considered a "PCB containment area" and the PCBs will continue to be available for bio-uptake in not only the immediate watershed area, but throughout the globe.

Sincerely,

Judith A. Herkimer, Director

c.c.- Bryan Olson, EPA

http://www.ctnow.com/news/local/hc-georgehoag0922.artsep22,1,1669618.story

Probe Stalls Research Leader's CareerBy GRACE E. MERRITT
Courant Staff Writer

September 22 2003

STORRS -- Not long after George E. Hoag arrived at the University of Connecticut to teach engineering in 1983, he began to carve out a career in environmental research.

The young professor led a research team that looked into pollution levels in spilled gasoline and used his expertise to develop technology to extract pollutants from the soil.

Four years later, Hoag made his mark by founding and building an institute on campus devoted to researching environmental problems and developing technology to address pollution.

Over the years, the Environmental Research Institute flourished, outgrowing its original space in the engineering department, then moving to UConn's Depot Campus and opening a mobile lab. The allure of ERI helped the university's engineering department recruit talented graduate students and expand its educational offerings. Hoag won awards, developed patents, received tenure and was promoted to full professor. He became an international expert on hydrocarbon clean-up and lectured across the globe.

But now Hoag, 50, finds himself at the vortex of an investigation by the state's attorney general. He has stepped down from his position as director of ERI and the university is now weighing whether to take disciplinary action against him.

Meanwhile, ERI is crawling with investigators from the FBI, the Environmental Protection Agency, UConn police and others. Two former ERI employees have already been arrested on criminal charges and a UConn investigation found that numbers were doctored on some research experiments at ERI.

What happened?

Business On The Side

Hoag apparently was running his own private consulting business on the side that took over much of his professional life, according to Attorney General Richard Blumenthal's investigation. Four years ago, Hoag incorporated Hoag Environmental Systems and opened offices in Connecticut, Kansas and Missouri, all while working as director of ERI at an annual salary of \$143,700.

He spent about 27 hours a week on his private consulting work and charged clients \$250 an hour, according to the investigation. Since 1999, he has taken in more than \$1.38 million from consulting, but failed to inform UConn of the scope of his activities, according to Blumenthal's investigation.

UConn's consulting policy limits faculty to a maximum of one day a week, or 20 percent of the workweek. In addition, the work must be disclosed to, and approved by, a department head. Karen Grava, the university spokeswoman, said UConn is not considering any revisions to its consulting policies.

Apparently distracted by his private work, Hoag took it upon himself to reorganize ERI's management structure and put a subordinate, Robert Carley, in charge, according to the investigation. Carley, who does not have a doctorate, was named director of operations, and Hoag assumed the title of executive director, the investigation said. The reorganization occurred without the knowledge of Hoag's supervisors, according to the investigation.

As of last year, the institute had 30 employees, 50 affiliated faculty members and generated more than \$5.6 million in revenue, which was split between the institute and the university. The lab does multidisciplinary research for private corporations and public agencies, such as the state Department of Environmental Protection. Its work

includes testing the water of Long Island Sound and measuring toxin levels in fish.

`Everybody Was Shocked'

Blumenthal's investigation found that Hoag's abandonment of management duties led to an array of abuses at ERI that are still under investigation. The charges include scientific misconduct, falsification of data, improper cash payments, the maintenance of a slush fund and assigning visiting scholars to work in private commercial laboratories in Rhode Island.

Several UConn sources said it was well known that Hoag was doing consulting work. In fact, it had become a joke that Hoag was never in his office, they said. But few seemed to know the full extent of the consulting.

"Everybody was shocked. Nobody knows much about this," said Tianmin Xie, laboratory director of ERI.

News of the consulting work and related misconduct rippled through the university this month. Professors downloaded copies of Blumenthal's report, and even the university's president, Philip E. Austin, sent an e-mail to the UConn community that described the scientific misconduct allegations as "a serious assault to the integrity of the university."

Some faculty members worried that the private consulting allegations may prompt the legislature to call for a broad investigation into faculty consulting practices. Others feared it would tar all UConn faculty.

"That kind of thing spills over in people's minds, even though it shouldn't. I don't like to see everyone painted with the same brush," said Gregory J. Anderson, an ecology and evolutionary biology department head and member of the university Senate.

Hoag's former boss, Robert V. Smith, former vice provost for research and graduate education and dean of the graduate school, said he had an inkling that Hoag was doing a lot of consulting work and asked him about it once in 2000.

"I had suspicions when I was there, but I had no hard evidence," said Smith, who is now provost and vice chancellor for academic affairs at the University of Arkansas.

"I always had a lot of respect for George. The allegations raised by the report are very distressing to me," Smith said. "It almost seems incongruent, given the persona that he presented and respect he had by colleagues."

No Comment

Hoag is regarded as professional, skilled at presentations and politically connected at the university, faculty sources said. Some described ERI as Hoag's "kingdom."

Hoag has declined to comment on his role in the ERI investigations. He is currently teaching two graduate seminars in the engineering department during the fall semester.

Edward Marth, executive director of UConn's chapter of the American Association of University Professors, said Blumenthal's report was incomplete and contained misinformation.

"It appears that there are some very rebuttable assertions in the report and a rebuttal is being prepared," Marth said. He declined to elaborate.

The university is evaluating whether to allow Hoag to continue teaching and assessing recommendations offered in the investigation.

Blumenthal suggested disciplining Hoag for failing to disclose and get approval for his consulting work, going over the consulting time limits, divesting himself of managing ERI without approval and appointing a subordinate without a doctorate to manage ERI. The investigation also suggests that the university consider legal action to

recover money paid to Hoag that he "did not fully or properly earn because he failed to fulfill his duties and responsibilities."

Although Hoag has tenure, it would not necessarily shield him. Tenure is designed to protect academic freedom in speech and research, but doesn't protect employees from lapses in job performance, Marth said.

Higher Education Commissioner Valerie Lewis said the consulting issue brings up a larger question of the conflicting roles of faculty at a research university.

"We want them working with business, we want them doing research to connect us to the state and community," she said. "On the other hand, we want them dedicated to their priority: the contract they signed to teach and do research that is university-based."